

ABSTRACT

A polishing slurry for semiconductor planarization containing cerium oxide particles and water, wherein the content of the cerium oxide particles having a diameter of 3 μm or more 5 is 500 ppm or less (weight ratio) in a solid, preferably 100 ppm or less and it is more preferable that D99 (99 % by volume of the whole particles in polishing slurry) of the cerium oxide particles is 1 μm or less. The polishing slurry can reduce the generation of scratches, and can polish a surface of the semiconductor substrate 10 in the wiring formation process of semiconductor device precisely at a high speed.